

IN THE SPECIFICATION:

Please replace the paragraph at page 3, lines 19 - 20, with the following rewritten paragraph:

-- Fig. 1A is a cross-sectional schematic drawing based on an SEM photograph photomicrograph showing ~~a cross-section of~~ a yttrium oxide coating on anodized aluminum alloy.

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Please replace the paragraph at page 3, lines 21 - 23, with the following rewritten paragraph:

-- Fig. 1B is a cross-sectional schematic drawing based on an SEM photograph photomicrograph showing ~~a cross-section of~~ a yttrium oxide coating on anodized aluminum alloy at higher resolution than the ~~Fig. 1A SEM photograph~~ photomicrograph upon which the drawing in Fig. 1A is based. --

Please replace the paragraph at page 3, lines 24 - 27, with the following rewritten paragraph:

-- Figs. 2A and 2B are top view schematic drawings based on SEM photographs photomicrographs showing, respectively, as-coated and after surface finished ~~anodized aluminum alloy coated with~~ yttrium oxide coating overlying anodized aluminum alloy, in accordance with the present invention. --

Please replace the paragraph at page 5, lines 19 - 27, with the following rewritten paragraph:

-- Fig. 1A shows ~~the cross-section~~ a cross-sectional schematic drawing of an as-coated sample. Fig. 1B shows a similar cross-sectional drawing taken from an SEM cross-section ~~taken~~ at higher resolution (100X higher). The Fig. 1A/1B ~~photographs~~ drawings clearly show that the coating layer was dense, with all pores being isolated from each other. The maximum porosity was determined to be less than 1-2% based on the apparent metallographic method. The Y₂O₃ coating to high purity aluminum alloy substrate interface is intact. No delamination or other interfacial defects, such as voids and cracks, are observed. --

Please replace the paragraph at page 6, line 31, through page 7, line 3, with the following rewritten paragraph:

-- First, a light mechanical finish is performed as part of the coating processes by manually holding a grinding tool over the as-coated surface, using a silicon carbide (SiC) as the grinding medium. Fig. 2A and 2B are ~~scanning electron micrographs~~ top view schematic drawings based on SEM photomicrographs that show ~~the~~ the as-coated surface 200 and after ~~finished~~ finishing surface 220, respectively, clearly demonstrating that, after coating, the as-coated surface is very rough, with many powders and nodules 202 loosely attached to the surface. However, after finish, the coating surface is dense and free from loose particles. --